

1973

A study of expenditures for materials in instructional materials centers in Iowa high schools

Janelle Kay Barkema
University of Northern Iowa

Let us know how access to this document benefits you

Copyright ©1973 Janelle Kay Barkema

Follow this and additional works at: <https://scholarworks.uni.edu/grp>

Recommended Citation

Barkema, Janelle Kay, "A study of expenditures for materials in instructional materials centers in Iowa high schools" (1973). *Graduate Research Papers*. 1737.
<https://scholarworks.uni.edu/grp/1737>

This Open Access Graduate Research Paper is brought to you for free and open access by the Student Work at UNI ScholarWorks. It has been accepted for inclusion in Graduate Research Papers by an authorized administrator of UNI ScholarWorks. For more information, please contact scholarworks@uni.edu.

A study of expenditures for materials in instructional materials centers in Iowa high schools

Find Additional Related Research in UNI ScholarWorks

To find related research in UNI ScholarWorks, go to the collection of [School Library Studies Graduate Research Papers](#) written by students in the [Division of School Library Studies](#), Department of Curriculum and Instruction, College of Education, at the University of Northern Iowa.

Abstract

Anyone who is familiar with present educational trends is well aware that the multi-media approach to learning has fairly recently become widely accepted and is now the major concern of many educators in their attempt to bring innovative and effective methods of teaching to the forefront. As educators continually strive to make learning process as efficient and exciting as possible, more and more of them are turning to new forms of media. Indeed, the ways in which a student makes use of his new-found responsibility of finding and utilizing information combined with the new international patterns require a variety of materials.

*A STUDY OF EXPENDITURES FOR MATERIALS
IN INSTRUCTIONAL MATERIALS CENTERS
IN IOWA HIGH SCHOOLS*

*A Research Paper
Presented to the
Faculty of the Library Science Department
University of Northern Iowa*

*In Partial Fulfillment
of the Requirements for the Degree
Master of Arts*

*by
Janelle Kay Barkema*

*Read and approved by
Charles Adams
Elizabeth Martin*

May 1973

*Accepted by Department
Elizabeth Martin*

Date May 16, 1973

*A STUDY OF EXPENDITURES FOR MATERIALS
IN INSTRUCTIONAL MATERIALS CENTERS
IN IOWA HIGH SCHOOLS*

*A Research Paper
Presented to the
Faculty of the Library Science Department
University of Northern Iowa*

*In Partial Fulfillment
of the Requirements for the Degree
Master of Arts*

*by
Janelle Kay Bankema
May 1973*

TABLE OF CONTENTS

	Page
LIST OF TABLES.	iii
Section	
1. THE PROBLEM	1
Introduction.	1
Statement of the Problem.	5
Importance of the Study	6
Basic Assumption.	8
Limitations of the Study.	8
Definitions of Terms.	10
2. REVIEW OF RELATED LITERATURE.	12
3. DESIGN OF THE STUDY	15
4. ANALYSIS OF THE DATA.	18
5. RESULTS	20
6. DISCUSSION.	23
7. SUMMARY	26
BIBLIOGRAPHY.	28
APPENDIX.	31

LIST OF TABLES

Table	Page
1. Analysis of Per Pupil and Non-Print Expenditures for Materials	22
2. Master Data Sheet	35

Section I

THE PROBLEM

Introduction

Anyone who is familiar with present educational trends is well aware that the multi-media approach to learning has fairly recently become widely accepted and is now the major concern of many educators in their attempt to bring innovative and effective methods of teaching to the forefront. As educators continually strive to make the learning process as efficient and exciting as possible, more and more of them are turning to new forms of media. Indeed, the ways in which a student makes use of his new-found responsibility of finding and utilizing information combined with the new instructional patterns require a variety of materials.

Although these means of communication such as films, television, etc., are relatively new to education, it is a well-known fact that nearly every other phase of an individual's waking hours has been virtually revamped by the influx of audiovisuals. Educators are finally becoming aware of the potential of this means of presenting content. Referring to students of today Darling writes, "They have never known a world without television. Their world has always included radios, motion pictures, films, magazines, and recordings."¹

¹R. L. Darling, "The New School Library Standards," Wilson Library Bulletin, 42:593, February, 1968.

Not only has the multi-media concept opened up opportunities for the average learner, but it has also created a variety of new possibilities in teaching the exceptional child in a more meaningful and successful manner. Margaret Sheviak pleads for more movement in this direction when she states,

Many nonreaders come from a society in which reading is not important--they learn in other ways, and we fail to motivate through those media which are important to them. We need to know how to read in this present age since the most important information is stored in the printed word, but it's too bad we have not yet moved to make multimedia as much a magic carpet as books.

Where does all of this leave the teacher who has no background in this new realm of teaching method? To whom will those teachers turn with their questions and daily need for qualified aid in selecting and using such materials appropriately? Truly, this new and fast-growing dependency on non-print materials has forced concerned educators to take a second, long, searching look at one of the most vital parts of the educational system. They must look to the place which only a few years ago would have failed them in this new quest, but due to its own ability to transform with the time is today able to cope with the situation at hand. What place is so capable? It is the Instructional Materials Center or media center, traditionally known as the library. With the disappearance of the traditional name has also gone the traditional concept of that print-oriented organization. In its place has arisen the new program of services based upon the concept of total integration of print and non-print (audiovisual) materials. It is this center known as the IMC which professes to be able to support the constantly changing patterns

²Margaret R. Sheviak, "The Message of Media," School Libraries, 20:19, Spring, 1971.

of instruction and curriculum development of today. This brings one to the logical conclusion that teachers do have a special place where they may find the necessary resources and services.

Although this theoretical jargon about new names, new concepts, and new programs all sounds fine on paper, troublesome questions keep clouding the picture. Just how much of this theory has remained an ideal, and how much, if any, has become part of reality? Does the literature really support IMC development? If so, is the IMC something we can actually see developing and functioning effectively in schools around us, or is it simply something about which lots of people like to speculate and theorize but always without any tangible evidence of action?

Part of this doubt can be erased by using numerous sources available on this topic. The literature abounds with articles advocating the IMC concept. According to Meierhenry, the point at which the most interest and excitement exists is the "teachable moment".³ He claims that it is the responsibility of the media program to meet these situations by providing "a range of resources on a variety of subjects". A similar view was taken early by Bartlett when he said,

Although various organizational structures might be adopted, the functional integration of the responsibilities for print and non-print is extremely important from an educational point of view. Students and faculty interested in gaining access to information in any form on a given topic should not be impaired in such investigations by structural fragmentation of available learning resources.⁴

³W. C. Meierhenry, "National Media Standards for Learning and Teaching," American Library Association Bulletin, 63:239, February, 1969.

⁴R. C. Bartlett, "Projection of Guidelines for the Multi-Media Center," North Central Association Quarterly, 43:226, Fall, 1968.

Another source quotes Quentin Fiore as saying in The Future of the Book that, "In a decade information will have become so abundant that it will have to be transmitted by methods other than print or remain in a state of perpetual suspension."⁵ In fact, the same source speculates about the future (1980) which is now less than a decade away and predicts that integration of print and non-print will have become so commonplace that any debate about it will be totally unnecessary.

... media, regardless of its form is merely the tool, the vital go-between, the communication link in the transmission of information from source to receiver. When it becomes an integral part of the content and its distribution system, a print and non-print dichotomy will be irrelevant.

Perhaps the most important piece of literature to be found confirming the already evidenced belief in Instructional Materials Centers is a small book entitled Standards for School Media Programs. This document which assumes responsibility for not only applauding a theory but also attempting to make guidelines for creating a reality out of that ideal was published in 1969. This work was written through the cooperation of two major educational groups, the American Association of School Librarians and the Department of Audiovisual Instruction of the National Education Association. The set of standards was established in the attempt to accomplish two purposes, "(1) to bring standards in line with the needs and requirements of today's educational goals and (2) to coordinate standards for school library and audiovisual programs."⁷

⁵J. P. Vergis and L. Twyford, "An Open Forum: Together or Separate: Viewpoints Concerning the Joint Media Standards," Audiovisual Instruction, 15:24, October, 1970.

⁶J. P. Vergis and L. Twyford, 15:23.

⁷American Association of School Librarians and Department of Audiovisual Instruction of NEA, Standards for School Media Programs (Chicago, Washington, D. C.: ALA and NEA, 1969), p. x.

These guidelines cover essential phases of IMC development from facility to staff. However, being able to read a set of specific standard requirements for the development and management of an Instructional Materials Center still does not satisfy the ultimate question. It is possible to read this booklet and the other available sources and still find no tangible evidence that all of this has made a major impact upon a majority of individual educational systems. The question remains. How far have schools progressed toward implementing this philosophy so widely accepted in educational literature today?

Statement of the Problem

To answer this overriding question, research must be done continually in today's schools. With an authorized set of standards available for a point of reference, researchers are logically left with the task of obtaining specific data from currently existing media centers. These two sources of information can then be systematically compared in an endeavor to reach conclusions valuable for today's media center as well as tomorrow's. However, because the standards themselves cover so many areas of IMC development, both qualitative and quantitative, it is impossible to attempt to do an in-depth survey of all of them in one study. Therefore, this study delved into one segment of the quantitative standards which lends itself more readily to measurement and objectivity. The purpose of this study was to learn if the larger high schools in Iowa are meeting the guidelines prescribed by the 1969 Standards for School Media Programs in the area of expenditures. The entire study was based upon the following passages.

The more important qualitative standards, representing the essential services to teachers and students, depend on their

full implementation upon the conditions noted in these quantitative measures.

To maintain an up-to-date collection of materials in the media center not less than 6 per cent of the national average for per pupil operational cost (based on average daily attendance) should be spent per year per student.

. . . Ordinarily, half of the annual appropriation should be spent on printed materials and half on audiovisual materials.

This figure does not include funds for school-adopted textbooks, reference materials housed permanently in classrooms, closed circuit television installations, subscription television, electronic learning centers, distribution systems, supplies, equipment, and the processing of materials.

In providing annual funds for materials, it is important that no schools fall below 6 per cent per student per year of the current national average for per pupil operational costs.

Importance of the Study

Once any standards or guidelines are developed it is assumed naturally that they will be utilized for a specific purpose, usually evaluation or measurement. Obviously, in order to make the best use of such standards, they must be utilized constantly and objectively. However, after an examination of the literature it becomes all too evident that the media program standards have been used as a basis for measurement very little, if at all. In fact, four full years have passed since their publication, and still no one has actually studied current conditions in relation to them. By now four sets of statistics and data could be available for analysis from which new and growing media centers could learn. How can improvements be made if one has no such information and does not know whether more could be done or not?

⁸AASL and DAVI of NEA, p. x.

⁹AASL and DAVI of NEA, p. 35.

¹⁰AASL and DAVI of NEA, p. 36.

This type of study then becomes extremely important because finally educators are able to look at facts and figures on a large scale and see just exactly what media centers in Iowa's larger high schools are doing. Individual directors of media centers will receive results of this study to use as they deem necessary in establishing their own budgets and media programs.

Hopefully this study will also encourage further evaluation to take place at all grade levels and in the many other phases of IMC development and management, perhaps even into the more subjective qualitative measures. Through its findings this study also brings to light several possible evaluative questions suitable for further study. For instance, one may ask if media centers are desperately in need of a new revival, or have they truly become leaders in the process of education? Are media centers so advanced that the standards have become obsolete, or is it possible that the standards must be revised because they are too demanding at this time, or is there absolutely no need for revision in so relevant a document? These questions all deal with change, a necessity in today's day and age if education is not to reach a stalemate. Once we know to what degree media centers have met IMC standards and not until then can we set feasible goals for the future.

Enough has been written about the theory of spending more money for a variety of materials and the integration of print and non-print. The time and need has indeed come for educators to take a concerned look at the facts and figures and then ask themselves, "Why are things the way they are right now?" "Is this the way things should be?" Once these questions have been asked and answered we will be ready to tackle the most important of all, "What will be our next step forward?"

Basic Assumption

The basic assumption of this study is that the 1969 Standards for School Media Programs has been accepted as an integral part of the theory of the educational process. This fact is vital to this study because it justifies any comparisons that have been drawn between the budgets of school media centers as they exist today and those standards. Among the multitude of endorsements which proclaim this document as the product of careful study and as an overwhelming success are these two typical examples. Dyer comments that, "Most people agree that the Standards will have strong impact upon education generally and audiovisual and library personnel specifically for many years to come."¹¹ In the same tone we are told, "This publication has since been hailed as '... the greatest single step forward in the field in the past 25 years.'¹²

Because these standards have been so widely acclaimed, the researcher must at this point accept them accordingly and utilize them as they stand in the process of measurement. Not until adopted theories and standards have been shown to be faulty through actual studies can one person justify the abolition of those ideals.

Limitations of the Study

The limitations of this study ~~were~~ tied basically to a student's

¹¹P. E. Dyer, "An Evaluation of the Joint Standards by Media People," Audiovisual Instruction, 15:88, April, 1970.

¹²Judith Burns, "The Joint Standards: Media on Mediocrity?," Educational Technology, 11:53, September, 1971.

limitations of resources and length of time spent in graduate school. To interview or even send a questionnaire to each and every school media center in Iowa would be utterly impossible. The sample for this study was limited to larger high schools in Iowa for numerous reasons. First of all, the high school level was chosen because at this point in media center development many elementary schools are just beginning to go beyond the basic requirement of Iowa law which calls for a centralized catalog. On the other hand, high schools have had library/media centers for a considerably longer period of time and have been required by state law to have a librarian, etc. Therefore, it is only logical in doing a study concerning the implementation of standards in library/media centers to concentrate at the level where a library/media center does exist in every school, especially when funds are limited. Because the researcher wanted this to be an intensive study, the impracticality of analyzing any more than one segment (expenditures) on any more than one grade level was immediately obvious.

The status survey was chosen for this study in order to be able to investigate all of a specific type of media center, namely, those in the larger high schools of Iowa. Thus, the findings of this survey indicate what is currently happening in that entire particular sample or category of schools in order to give more accurate information to those involved.

Based upon the findings of this study similar studies could be conducted with smaller high schools as well as elementary and junior high schools constituting the sample. For the one hundred schools involved in the study the results are extremely beneficial because all high schools of comparable size were contacted, instead of simply selecting

a random sample. However, this means these results are not applicable to a larger target population.

The door is also wide open for further studies involving the logical questions which can evolve from a ground-work study such as this. Naturally, one is led to ask why things are as they are, to ask if they should be any different, and ultimately to ask what must be done to improve upon present conditions. This study remains objective in nature in reporting present conditions, and the research is able to suggest only hypothetical conclusions as to why things are as they are. Follow up studies may be conducted to handle that type of related problem. Perhaps the greatest limitation of any study dealing with facts and figures is its inability to deal with the very subjective, but very vital aspect of quality.

Definitions of Terms

Instructional Materials Center (IMC): A learning center in a school where print and audiovisual forms of communication and a program of instructional services are accessible to students and teachers.

Materials, media software (print/non-print): This category includes such instructional materials as books, magazines, newspapers, films, filmstrips, tapes, records, transparencies, kits, maps, art prints, programmed materials, etc. It excludes classroom textbooks, workbooks, reference books kept permanently in classrooms, supplies such as mimeograph paper, erasers, chalk, etc., hardware equipment such as record players, film projectors, tape recorders, overhead projectors, etc.

Print software: A division of media software which includes books, magazines, newspapers, maps, art prints, programmed materials, etc.

Non-print software, audiovisual materials: A division of media software which includes films, filmstrips, tapes, records, transparencies, kits which contain non-print, any materials in the category of projected or playback, any materials that require a machine to be used, etc.

Section 2

REVIEW OF RELATED LITERATURE

The literature is literally filled to capacity with a multitude of "without a doubt" full-fledged acceptances of the 1969 Standards for School Media Programs, and, logically, acceptances of all that it sets forth from the initial IMC concept to the discussion of provisions for clerical staff. Otis McBride echoes with clarity the consensus of the majority of educators,

The little book is a set of guidelines, a collection of helpful and logical suggestions.

. . . The Standards represents a monumental piece of work accomplished through cooperative effort of two large professional organizations.

. . . I venture to say that by 1974 most of the current recommendations will have been met and we shall be looking forward to additional recommendations for our expanding school set-up.

However, it is necessary to look at specifics within the Standards. What is actually being said about the expenditures called for by these standards? Once again, the literature maintains from a theoretical standpoint that there is no reason why these standards should not be taken seriously and met by each and every media center. Advocates not only support and endorse the budget proposals but acclaim expenditures as being extremely vital to the success of any media center. Bartlett calls the commitment of financial resources to the media center "a first priority" and later claims that up to ten percent of the general

¹³Otis McBride, "Library Media Center of Today," Educational Leadership, 28:153, November, 1970.

educational budget would be necessary for a developing media center.¹⁴

Burns speaks to the small group of doubters of the 1969 recommendations,

Finally, a few Standards defenders react against the suggestion that implementation might be too expensive for some schools, arguing that implementation of the Standards could result in economies. Implementation, too, might overcome competition for funds among the various media and promote more efficient use of media; *School Library Journal* said: "the investment in the media center as the focus for materials to be shared by the entire school to support individualized instruction seems not only justifiable, but economical, in the long run."¹⁵

Although adequate budgets and divisions for print and non-print materials are only one facet of the success of the entire media program and are essentially without real merit all alone, budgets do represent policies and do become tangible, outward signs of the inner philosophy of the media center and its staff as well as of the school. Because of their nature, budgets also avail themselves to frequent periodic review and, therefore, to regular evaluation of the goals and objectives of the entire media program. If allowances for new improvements are not made in the budgeting procedures, what segment of the program can accept increasing challenges? Speaking about the purpose and importance of the budgeting procedure Wedgworth says, "As a planning device, it should communicate the purposes and objectives of management. As a control device, it should establish the basis for measuring progress toward stated objectives in dollars and cents."¹⁶

In conclusion, we see writer after writer devotedly defending

¹⁴R. C. Bartlett, "Projection of Guidelines for the Multi-Media Center," *North Central Association Quarterly*, 43:227, Fall, 1968.

¹⁵Guilth Burns, "The Joint Standards: Media or Mediocrity?," *Educational Technology*, 11:56, September, 1971.

¹⁶Robert Wedgworth, "Budgeting for School Media Centers," *School Libraries*, 20:31, Spring, 1971.

the recommendation of the Standards that at least six percent of the national average for per pupil operational cost be spent per year per student for materials, half print and half non-print. As many articles can be found dealing with the importance of the process of budgeting. Where is the article which tells us how much money media centers are actually spending and in what proportions they are spending that money? It has been four full years now since the standards were written. Everyone has heard again and again what must be done, but who is going to find out what is being done? How do we know these standards have not been so far surpassed by schools that they have become useless? On the other hand, is it possible that no school can ever reach such goals? Are the standards just as useless in that case? Is it that schools do not know enough about the recommendations and how their individual media centers compare in order to use them effectively? Are school media centers using the standards consistently and successfully? The answers to these and other similar questions would be extremely valuable to any concerned educator. Progress in any field depends upon knowing about the current problems and successes, whatever the case may be.

People like Otis McBride were making predictions about 1974. Here it is 1973, and what do we know now that we did not know when the standards and those optimistic forecasts were first created? Have we simply allowed four years to pass--four years full of potential for growth--simply from lack of knowledge about the real world around us? Theory is fine when used as a basis for application, but application and its counterparts, measurement and evaluation, seem to have become simply after-thoughts, problems someone else can worry about later. This study was concerned about these problems and reached educators in real media centers and libraries to learn about something which has been too often neglected--reality itself.

Section 3

DESIGN OF THE STUDY

Information of various types was necessary to answer the problem proposed in this study. To find out whether six percent of the national average for per pupil operational cost is being allocated for materials, it was necessary to find out the 1971-1972 national average. The final report of the National Center for Educational Statistics for 1971-1972 was not available, and the figure has not been published in any other form as of this date. However, the current expenditure per pupil in average daily attendance in public elementary-secondary schools of the United States was found to have been \$858 in 1970-1971.¹⁷ Even though the most appropriate figure (schools were to report their 1971-1972 budgets) was not available, the rate of increase can still be realized by comparing the above figure with the projected national average for 1972-1973 which is expected to be \$1,064.¹⁸ A third figure was secured for purposes of comparison. This amount, \$902.57,¹⁹ was the average for Iowa schools, 1971-72. Finally, the Iowa High School Athletic Association was able to supply the

¹⁷U. S., Department of Health, Education, and Welfare, Office of Education, *Statistics of Trends in Education*, DHEW Publication, No. (OE) 72-97 (Washington: Government Printing Office, 1972).

¹⁸U. S., Department of Health, Education, and Welfare, Office of Education, *Fall 1972 Statistics of Public Schools Advance Report*, DHEW Publication, No. (OE) 73-11408 (Washington: Government Printing Office, 1973).

¹⁹Iowa, Department of Public Instruction, *Iowa Public School Data 1971-1972 School Year*, DPI Publication, No. 2100-B23870 (Des Moines: DPI, 1973), p. 24.

names of the one hundred largest high schools according to total enrollment for the state of Iowa.²⁰ The average daily attendance figures as listed in Table 2 on page 35 of the Appendix ranged from 356 to 2582.

The other vital information was obtained by means of a questionnaire²¹ which was sent with a cover letter,²² a page of definitions,²³ and a stamped, return-addressed envelope to the library/media centers of the one hundred largest high schools in Iowa. The questionnaire was first sent to ten high schools to determine any problems or misunderstandings which might arise in the questions. For that pilot survey those schools were asked to list any helpful criticisms, suggestions, or problems.

The first section of the questionnaire consisted of five major questions to be answered by the librarian/media specialist. These covered enrollment (average daily attendance), total media center budget for 1971-1972 for materials plus divisions for print and non-print, and also the high school's total budget for rental films, if separate from the regular library/media center budget.

The second section of the questionnaire was included for those schools who have separate departmental budgets which account for expenditures in the materials area. The administrator was asked to answer those three questions which also covered the total materials budget plus the two divisional budgets.

²⁰Iowa High School Athletic Association, 1972-1973 Iowa High School Athletic Association Directory (Boone, Iowa: Printing Department, 1972), pp. 1-56.

²¹Appendix, p. 33.

²²Appendix, p. 31.

²³Appendix, p. 32.

The definition sheet which accompanied the questionnaire defined explicitly the terms used in the questionnaire. The terms defined were media software (print/non-print) which is what the Standards refers to as "materials," print software, and non-print software or what the Standards calls "audiovisual materials."

There was ninety percent response with no school in the pilot study reporting any major difficulty with the questionnaire. However, only two schools were able to completely answer the second section of the questionnaire. Therefore, on the basis of this pilot study, it was decided that the second section would not be indicative of current trends and would perhaps hinder the response to the first section. It was entirely eliminated in the final survey. The first section was assumed to be clear in its purpose and able to supply the essential information.

The revised questionnaire²⁴ and other enclosures were then sent to the other ninety high schools. Because the total response amounted to sixty five, the survey was conducted a second time with those thirty five schools who had not responded previously. After the second mailing the total return was eighty percent. However, three of those were deemed invalid because statistics were unavailable for the respondent.

²⁴Appendix, p. 34.

Section 4

ANALYSIS OF THE DATA

Six percent of the confirmed 1970-71 national average for per pupil operational cost was computed as the amount that should be spent per pupil per year in each school for materials following the suggestion of the Standards.²⁵ For further comparisons in the study six percent was also taken of the projected 1972-1973 figure and the Iowa average operational cost for 1971-1972. These figures are discussed in the Results on page 20.

For those schools needing to respond to only the first four questions of the questionnaire²⁶ the following procedure took place. The total materials budget was divided by the average daily attendance reported on the questionnaire. This quotient was then readily available for comparison with the figures computed above. For those schools having to answer question five, the amount spent for rental films was first added into the appropriate categories, to number three on non-print expenditures and also to number four concerning the total materials budget. Then these questionnaires with their revised totals underwent the same process as the others to determine per pupil expenditure.

The second major part of the analysis involved the total materials budget. It was compared to the separate print and non-print budgets to

²⁵American Association of School Librarians and Department of Audiovisual Instruction of NEA, Standards for School Media Programs (Chicago, Washington, D. C.: ALA and NEA, 1969), p. 35.

²⁶Appendix, p. 34.

see how they compared to the three percent-three percent division proposed by the 1969 recommendations for the overall six percent figure. The figures easily reveal whether or not the media centers are allocating fifty percent of their total budgets for print materials and fifty percent for non-print materials.

However, the real importance in this study was to determine trends in budgeting in larger high schools in Iowa. Therefore, averages become extremely necessary.²⁷ For this purpose the schools were divided according to average daily attendance reported on their questionnaires into five groups. The averages were found for per pupil expenditure as well as for the percentage of non-print expenditure for each of the five groups. Finally, the overall average was computed for both of these categories.

²⁷Results, p. 20.

Section 5

RESULTS

The results of this study are fairly conclusive. According to the standards used for comparison²⁸ six percent of the national average for per pupil operational costs should be spent per pupil in each school. This means that six percent of \$858 (1970-1971 national average)²⁹ or \$51.48 should be spent per pupil each year. Referring to Table 2 on page 35 of the Appendix one sees that not one school in Iowa is spending nearly that much on materials. The figures range from \$2.68 to \$24.59. The same is true when the Iowa average operational cost is used as a basis for comparison. In fact the situation is worse because for 1971-1972 the figure was \$902.57.³⁰ Six percent of that amount is \$54.15. Of course the projection for 1972-1973's national average operational cost is even more remote. Schools should be allocating six percent of \$1064³¹ or \$63.84 for each student for materials next year.

Upon examination of the expenditures for the divisions of print and non-print materials, the results are overwhelmingly indicative of the fact

²⁸American Association of School Librarians and Department of Audiovisual Instruction of NEA, Standards for School Media Programs (Chicago, Washington, D. C.: ALA and NEA, 1969), p. 35.

²⁹U. S., DHEW, Office of Education, Statistics of Trends in Education, DHEW Publication, No. (OE) 72-97 (Washington: Government Printing Office, 1972).

³⁰Iowa, DPI, Iowa Public School Data 1971-1972 School Year, DPI Publication, No. 2100-B23870 (Des Moines: DPI, 1973), p. 24.

³¹U. S., DHEW, Office of Education, Fall 1972 Statistics of Public of Public Schools Advance Report, DHEW Publication, No. (OE) 73-11408 (Washington: Government Printing Office, 1973).

that few library/media centers are actually spending fifty percent of their budgets for audio-visuals. Table 2 reveals only 8 schools that do meet the guidelines set forth by the standards concerning this while 11 schools spend nothing for non-print.

In dividing the schools into groups for purposes of analyzing averages for expenditures, five divisions according to average daily attendance were made. The first group listed in Table 1³² contains thirty schools and ranges from an average daily attendance of 356 to one of 598. The second group consists of seventeen schools of ADA (average daily attendance) 600 to 890. In group three there are twelve schools from 1000 to 1380. The schools with ADA ranging from 1465 to 1773 are included in the eleven in group four. Group five is made up of seven schools with ADA of 1810 to 2582.

For each of these groups two figures were computed as shown in Table 1. First of all the average expenditure per pupil for materials was computed for that particular school size. The results are as follows: Group 1, \$10.80; Group 2, \$9.19; Group 3, \$6.57; Group 4, \$7.58; and Group 5, \$5.05.

The second figure found was the average percentage of budget allotted for non-print. The results are: Group 1, 28.86 percent; Group 2, 26.8 percent; Group 3, 28.08 percent; Group 4, 30.64 percent; and Group 5, 24.86 percent.

The totals indicate averages in each of these two major areas for the entire sample surveyed as indicated by the responses received. The average expenditure per pupil is \$8.80, and the average percentage spent for non-print is 28.19 percent.

³²Table 1, p. 22.

Table 1
Analysis of Per Pupil and Non-Print
Expenditures for Materials

Schools Grouped by Average Daily Attendance	Average Expendi- ture Per Pupil for Materials	Average Percent- age Expenditure for Non-Print
Group 1 356 - 598	\$10.80	28.86%
Group 2 600 - 890	9.19	26.80
Group 3 1000 - 1380	6.57	28.08
Group 4 1465 - 1773	7.58	30.64
Group 5 1810 - 2582	5.05	24.86
Groups 1 - 5	8.80	28.19

Related figures:

National average per pupil operational cost for 1970-71 = \$858.00
6% of \$858.00 = 51.48

Projected national average per pupil operational cost
for 1972-73 = \$1064.00
6% of \$1064.00 = 63.84

Iowa average per pupil operational cost for 1971-72 = \$902.57
6% of \$902.57 = 54.15

Section 6

DISCUSSION

Today's literature which concerns itself with educational concepts and instructional methods is saturated with articles praising the utilization of materials other than print. It seems that again and again one finds educators attributing audiovisual devices, programmed aids, kits, etc. with such characteristics as efficiency, effectiveness, and excitability. It is not only the multi-media concept that is strongly advocated in literature relative to this study, but also the idea or ideal of having all types of media used for instructional purposes integrated in the Instructional Materials Center to such a degree that it becomes the content that is of most importance, and discrimination between the two forms of media ends. Finally, the 1969 Standards for School Media Programs, a document written by professionals to establish guidelines pertaining to and hopefully promoting the multi-media concept as well as the idea of the Instructional Materials Center, has received applause from virtually a majority of educators everywhere, and the speculations made about the success and future progress this booklet will create are extremely optimistic. With so much positive theorizing occurring so prevalently it is about time (four years after the Standards was published) that we discover whether or not we are acting out those theories we espouse.

The easiest and perhaps most objective method to use in evaluating and measuring ourselves involves the process of studying quantitative traits. This study concerned itself with a vital aspect of implementation of philosophy

which lends itself easily to statistical evaluation, the budgeting process. Our strong defense for certain theories should be as tangible and visible in everyday practices. Until we see where we are in relation to accepted goals, the possibility for change and for using these goals for any real purpose is very slim.

In reality the evidence shows that contrary to McBride's prediction that by 1974 (next year!) most of the recommendations will be met³³ and to Fione's belief that by 1980 (only seven years away) integration will be so commonplace that we will take it for granted,³⁴ we have barely begun in Iowa to integrate non-print materials into the school systems. Iowa's larger high schools are allocating on the average only a little over half of what the standards prescribe according to the information in Table 1 on page 22.

Equally out of perspective with those guidelines set forth in 1969 is the figure representing average per pupil expenditure for materials whether print or non-print in Iowa's larger high schools. That figure shown in Table 1 amounting to \$8.80 is approximately 17 percent of the \$51.48 that should be spent for each pupil and is not six percent but only one percent of the national average.

The conclusions are easy to make. No, these high schools in Iowa are not meeting the requirements specified by the standards. However, the next obvious question is, "Why aren't they?" Only speculation is possible now that this status survey is completed, but perhaps several

³³Otis McBride, "Library Media Center of Today," Educational Leadership, 28:153, November, 1970.

³⁴J. P. Vergis and L. Twyford, "An Open Forum: Together on Separate: Viewpoints Concerning the Joint Media Standards," Audiovisual Instruction, 15: 24, October, 1970.

possibilities can be discussed and investigated through further study. This study represents only the beginning of many discoveries that could and should be made.

One should take into consideration that a small difference in results may have been found if the second section of the pilot questionnaire³⁵ would have been capable of obtaining reliable information regarding the departmental budgets of schools. Especially in larger schools part of the purchasing of materials may be done by individual departments. Perhaps some schools are depending upon free use of materials from regional centers. It is also possible that the librarians in some schools are not acquainted with or else do not handle the non-print materials. This would be the case in schools which have a separate audiovisual department. Limitation of space in the facility may be a contributing factor. A final possibility could be related to economics and financial resources which could cause the standards to be unrealistic for today's schools.

Although this study is based upon a status survey and attempts only to portray budgeting practices as they occur in one particular sample or group of schools, it is hoped that other studies will now take place regarding other levels and other sizes of schools. Ultimately the more qualitative aspects of Instructional Materials Center development should also be studied in order that we may have tangible evidence of how well we put our philosophy into practice.

³⁵Appendix, p. 33.

Section 7

SUMMARY

The purpose of this study was to determine whether or not the larger high schools in Iowa are meeting the guidelines of the 1969 Standards for School Media Programs. A booklet such as this that has received such glowing appraisals is assumed to be vital and functional in education. The standards state that six percent of the national average for per pupil operational costs should be spent per pupil per year in each school, and that half of that amount should be spent for non-print materials.³⁶ However, one can not assume this is being carried out until actual research has been conducted and facts and figures are available for comparison.

Therefore, this study set out by means of questionnaire to find out the truth in Iowa. A five item questionnaire³⁷ was sent to Iowa's one hundred largest high schools. The questions covered average daily attendance and expenditures for print and non-print materials. Eighty questionnaires were returned; three were invalid.

For each school the per pupil expenditure for materials was computed as well as the percentage spent on non-print materials as shown in Table 2 on page 35 of the Appendix. These figures were then readily available for comparison with the suggested figures \$51.84 and 50 percent, respectively.

³⁶American Association of School Librarians and Department of Audiovisual Instruction of NEA, Standards for School Media Programs (Chicago, Washington, D. C.: ALA and NEA, 1969), p. 35.

³⁷Appendix, p. 34.

The responses were then divided into five groups according to average daily attendance, and averages were found for each group in both the per pupil expenditure category and also the non-print materials category as shown in Table 1 on page 22. The average for the entire sample in both of these areas was also computed.

It was found that the average per pupil expenditure for materials for these schools was \$8.80 in 1971-1972 and that the average percentage spent on non-print materials was 28 percent. Therefore, the evidence is conclusive that this particular group of Iowa high schools is not meeting the guidelines set forth in the 1969 Standards for School Media Programs. There is much room for more research in this area to determine whether this is true of other sizes and levels of school, to discover reasons for this situation, and finally to investigate the possibilities for improving the quality of Iowa media center programs.

BIBLIOGRAPHY

- American Association of School Librarians and the Department of Audio-visual Instruction of the National Education Association. Standards for School Media Programs. Chicago, Washington D. C.: American Library Association and National Education Association, 1969.
- Bartlett, R. C. "Projection of Guidelines for the Multi-Media Center," North Central Association Quarterly, 43:224-228, Fall, 1968.
- Burns, Judith. "The Joint Standards: Media or Mediocrity?," Educational Technology, 11:53-56, September, 1971.
- Cramer, Paula and Sybil Gilman. "PPBS: What Should the School Dollar Buy?," Educational Leadership, May, 1972. pp. 564-567.
- Cyr, Helen W. "Why NOT the Instant Media Center?," School Libraries, 20:21-23, Spring, 1971.
- Darling, R. L. "The New School Library Standards," Wilson Library Bulletin, 42:593-601, February, 1968.
- Dyer, P. E. "An Evaluation of the Joint Standards by Media People," Audiovisual Instruction, 15:88, April, 1970.
- Elstein, H. and F. R. Hertz. "Standards, Selection, and the Media Center: Where Are We Now?," Audiovisual Instruction, 15:35-39, December, 1970.
- Gaines, Ervin J. "The 2½ Percent Box," Library Journal, 95:3452, October, 1970.

Gilkey, Richard. "Media Standards: Myth or Reality," Clearing House, October, 1969. pp. 127-128.

Gilman David Alan. "Can Instructional Technology Survive the Joint Media Standards?," Educational Leadership, 28:155-157, November, 1970.

Hartz, Frederick R. and Richard T. Samuelson. "Origin, Development, and Present State of Secondary School Library as an IMC," Peabody Journal of Education, 43:33-39, July, 1965.

Howard, L. "Better Look at Budgets; Cooperation to Improve Media Programs," Library Journal, 96:1081-1082, March, 1971.

Iowa. Department of Public Instruction. Iowa Public School Data 1971-1972 School Year. DPI Publication, No. 2100-B23870. Des Moines: DPI, 1973.

Iowa High School Athletic Association. 1972-1973 Iowa High School Athletic Association Directory. Boone, Iowa: Printing Department, 1972.

Lownie, Jean E. "Organization and Operation of School Library Materials Centers," Library Trends, 16:211-227, October, 1967.

McBride, Otis. "Library Media Center of Today," Educational Leadership, 28:151-154, November, 1970.

McConkle, Jeanne. "When Does a Library Become a Media Center?," School and Community, 57:10+, May, 1971.

Meienhenry, W. C. "National Media Standards for Learning and Teaching," American Library Association Bulletin, 63:238-241, February, 1969.

Morris, Barry. "Budgeting to Meet the New Standards," School Activities and the Library, 1970. pp. 5-6.

- _____. "The Dollars and Sense of the Standards," School Library Journal, April, 1970. pp. 50-51.
- Powell, Judith. "From Library to Media Center: There IS a Difference," National Association of Secondary School Principals Bulletin, 55: 79-85, March, 1971.
- Sheviak, Margaret R. "The Message of Media," School Libraries, 20:17-20, Spring, 1971.
- Trenholme, A. K. "The New National Standards for School Media Programs: A Great Step Forward," Audiovisual Instruction, 13:697-699, September, 1968.
- U. S. Department of Health, Education, and Welfare. Office of Education. Fall 1972 Statistics of Public Schools Advance Report. DHEW Publication, No. (OE) 73-11408. Washington: Government Printing Office, 1973.
- U. S. Department of Health, Education, and Welfare. Office of Education. Statistics of Trends in Education. DHEW Publication, No. (OE) 72-97. Washington: Government Printing Office, 1972.
- Vergis, J. P. and L. Twyford. "An Open Forum: Together or Separate: Viewpoints Concerning the Joint Media Standards," Audiovisual Instruction, 15:22-229, October, 1970.
- Vinson, L. O. "Outstanding Innovation: Joint AASL-DAVI Standards for School Media Programs," American Library Association Bulletin, 63:235-237, February, 1969.
- Wedgeworth, Robert. "Budgeting for School Media Centers," School Libraries, 20:29-36, Spring, 1971.

APPENDIX

COVER LETTER

Dear librarian-media specialist:

As a graduate student in the Department of Library Science at the University of Northern Iowa, I am conducting a research study which I know will be of benefit to library-media centers in the state of Iowa. The study is concerned with expenditures for instructional materials in Iowa's larger secondary schools. In order to obtain the necessary information, I am asking numerous schools to fill out a short questionnaire.

Because a study such as this has not been conducted before, I would appreciate your help in making it a success. It is extremely important that all questionnaires be returned and that all questions about your school be answered accurately. All information obtained from the questionnaire will be used for statistical purposes only, and the results will not reveal the names of individual schools. Each school that responds will receive a summary of the results of the study which will indicate present trends in Iowa's library-media centers.

A separate sheet has been included which contains several definitions which should clarify any questions you may have about the terms used in the questionnaire. Please be sure to read through those definitions before completing the questions. Any suggestions concerning the questionnaire will be appreciated.

Please return the questionnaire in the stamped, return-addressed envelope which has been provided for you by March 23, 1973. Thank you for your cooperation and valuable contribution.

Sincerely,

Janelle Bankema
Researcher

DEFINITIONS

MEDIA SOFTWARE (PRINT/NON-PRINT): This category includes such instructional materials as books, magazines, newspapers, films, filmstrips, tapes, records, transparencies, kits, maps, art prints, programmed materials, etc. It excludes classroom textbooks, workbooks, reference books kept permanently in classrooms, supplies such as mimeograph paper, erasers, chalk, etc., hardware equipment such as record players, film projectors, tape recorders, overhead projectors, etc.

PRINT SOFTWARE: A division of media software which includes books, magazines, newspapers, maps, art prints, programmed materials, etc.

NON-PRINT SOFTWARE: A division of media software which includes films, filmstrips, tapes, records, transparencies, kits which contain non-print such as Checkered Flag Series, any materials in the category of projected or playback, any materials that require a machine to be used, etc.

PILOT STUDY QUESTIONNAIRE
(refer to definition sheet)

TO BE COMPLETED BY THE LIBRARIAN-MEDIA SPECIALIST

1. What was your high school's enrollment for 1971-1972 (average daily attendance)? _____
2. What was your media center/library total budget for print software in 1971-1972? _____
3. What was your media center/library total budget for non-print software in 1971-1972? _____
4. What was your media center/library total budget for media software (print/non-print) in 1971-1972? _____
5. What was your high school's total budget for rental films in 1971-1972? (if already included in above statements omit this question) _____

TO BE COMPLETED BY THE BUILDING PRINCIPAL
(if departments have their own software budgets separate from library)

In answering questions #6-#8 do not include funds spent for classroom supplies and equipment.

6. What was the total of the departmental budgets for print software in 1971-1972 excluding textbooks, workbooks, supplies, etc? _____
7. What was the total of the departmental budgets for non-print software in 1971-1972 excluding textbooks, workbooks, supplies, etc? _____
8. What was the total of the departmental budgets for media software (print/non-print) in 1971-1972 excluding textbooks, workbooks, supplies, etc? _____

SUGGESTIONS:

YOUR NAME AND ADDRESS:

PLEASE RETURN BY MARCH 23 TO:

Janelle Bankema

141 B Bartlett

University of Northern Iowa

Cedar Falls, Iowa 50613

SURVEY QUESTIONNAIRE
(refer to definition sheet)

TO BE COMPLETED BY THE LIBRARIAN-MEDIA SPECIALIST

1. What was your high school's enrollment for 1971-1972 (average daily attendance)? _____
2. What was your media center/library total budget for print software in 1971-1972? _____
3. What was your media center/library total budget for non-print software in 1971-1972? _____
4. What was your media center/library total budget for media software (print/non-print) in 1971-1972? _____
5. What was your high school's total budget for rental films in 1971-1972? (if already included in above statements omit this question) _____

COMMENTS OR SUGGESTIONS:

YOUR NAME AND ADDRESS:

PLEASE RETURN BY MARCH 23 TO:

Janelle Bankema

141 B Bartlett

University of Northern Iowa

Cedar Falls, Iowa 50613

Table 2
Master Data Sheet

<i>Schools by Average Daily Attendance</i>	<i>Expenditure Per Pupil for Materials</i>	<i>Percentage Expenditure for Non-Print</i>
1. 356	\$16.00	55%
2. 370	5.79	20
3. 380	4.74	0
4. 387	8.14	43
5. 390	12.81	24
6. 400	7.50	0
7. 400	11.25	33
8. 401	16.98	51
9. 444	13.52	33
10. 450	12.34	19
11. 450	9.78	20
12. 458	3.39	52
13. 465	5.81	11
14. 488	7.79	0
15. 488	14.31	45
16. 490	10.20	-
17. 494	8.70	19
18. 495	10.10	50
19. 499	16.35	22
20. 504	11.66	34
21. 517	7.35	18
22. 525	18.10	42
23. 550	10.45	23
24. 554	8.84	0
25. 560	6.43	-
26. 562	7.12	38
27. 587	15.34	44
28. 591	6.77	25
29. 597	24.59	32
30. 598	11.93	55

Table 2 (continued)

Schools by Average Daily Attendance	Expenditure Per Pupil for Materials	Percentage Expenditure for Non-Print
31. 600	\$8.67	29%
32. 619	3.50	0
33. 650	-	0
34. 650	4.23	31
35. 650	12.31	-
36. 652	5.37	0
37. 671	5.96	18
38. 675	7.78	38
39. 680	7.21	20
40. 707	10.61	33
41. 720	11.39	27
42. 725	17.23	33
43. 852	8.63	44
44. 854	11.12	42
45. 855	6.32	-
46. 882	12.47	41
47. 890	14.27	46
48. 1000	5.15	53
49. 1050	7.33	22
50. 1149	5.66	31
51. 1150	3.38	0
52. 1150	10.00	4
53. 1200	4.83	0
54. 1224	5.22	0
55. 1250	2.73	48
56. 1305	8.50	15
57. 1338	8.18	45
58. 1354	13.50	44
59. 1380	4.35	75
60. 1465	4.60	9

Table 2 (continued)

Schools by Average Daily Attendance	Expenditure Per Pupil for Materials	Percentage Expenditure for Non-Print
61. 1500	\$10.50	23%
62. 1508	8.45	24
63. 1530	8.01	39
64. 1570	7.20	26
65. 1600	10.61	31
66. 1634	5.32	66
67. 1660	7.17	12
68. 1700	5.72	20
69. 1733	5.91	46
70. 1773	9.93	41
71. 1810	5.06	16
72. 1850	5.81	49
73. 1998	3.76	38
74. 2000	7.50	33
75. 2050	4.49	9
76. 2200	2.68	0
77. 2582	6.05	29